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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,985	04/15/2004	Kazuhiro Hara	450100-4879.1	7539

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FROMMER LAWRENCE & HAUG LLP  
745 FIFTH AVENUE  
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EXAMINER
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JACKSON, JENISE E

ART UNIT	PAPER NUMBER
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2131

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/25/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/824,985	<b>Applicant(s)</b> HARA, KAZUHIRO	
	<b>Examiner</b> Jenise E. Jackson	<b>Art Unit</b> 2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 20-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>20070102</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION*****Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 20-31 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of copending Application No.

09/309412. Claim 20 is an independent claim and it is rejected under double patenting, all the dependent claims are rejected under double patenting. Therefore, dependent Claims 21-31 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting.

Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons listed below:

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Application 10/824985 Claim 20	Application 09/309412 Claim 1
A data transmission controlling method for controlling transmission of data from data transmitting means to data receiving means over communication channels	A data transmission controlling method for controlling transmission of data from data transmitting means to data receiving means over at least first and second communication channels, data communication controlling
For causing the data transmitting means to encrypt data and transmit the encrypted data to the data receiving means over the communication channels, the data transmission controlling method including	Transmitting data encrypted by the data transmitting means to the data receiving means over the first communication channel provided for data transmission from the data transmitting means to the data receiving means
Encapsulated the data to be transmitted in multiplexed fashion in accordance with a first protocol	Wherein prior to transmitting the encrypted data over the first communication channel, the data transmitting means encapsulates data
Encrypting at least one of data capsules resulting from the encapsulation	Wherein at least one of the data capsules resulting from the encapsulation is encrypted
Encapsulated the encrypted data capsules in accordance with a second protocol	Wherein the data to be transmitted is first encapsulated in accordance with the first protocol and further encapsulated in accordance with a second protocol
	Wherein the data transmitting means supplements an encrypted data section with a section header containing destination address information; and transmitting restrictive data transmission control information to the data receiving means over the second communication channel having a smaller capacity of data transmission than the first communication channel, the second communication channel including communication channels installed independently of the first communication channel; wherein the restrictive data transmission control information transmitted over the second
	communication channel is operating to allow only intended data receiving means to receive the encrypted data, and is configured to substantially simplify decryption of the encrypted data transmitted

	over the first communication channel
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Claim 20 of application 10/824985 is anticipated by Claim 1 of application 09/309412 in that Claim 1 of application 09/309412 contains all the limitations of Claim 20 of application 10/824985. Claim 20 of the 10/824985 therefore is not patently distinct from the earlier application 09/309412 and as such is unpatentable for obvious-type double patenting.

A later patent claim is not patentably distinct from an earlier patent claim if the later claim is obvious over, or anticipated by, the earlier claim. In re Longi, 759 F.2d at 896, 225 USPQ at 651 (affirming a holding of obviousness-type double patenting because the claims at issue were obvious over claims in four prior art patents); In re Berg, 140 F.3d at 1437, 46 USPQ2d at 1233 (Fed.Cir 1998) (affirming a holding of obviousness-type double patenting where a patent application claim to a genus is anticipated by a patent claim to a species within that genus).” ELI LILLY AND COMPANY v BARR LABORATORIES, INC., United States Court of Appeals for the Federal Circuit, ON PETITION FOR REHEARING EN BANC (DECIDED: May 30, 2001).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 20-26, 28-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seth-Smith(4,829,569) in view of Gotwald(5987,518).

5. As per claim 20, Seth-Smith discloses a data transmission controlling method for controlling transmission of data from data transmitting means to data receiving means over communication channels(see col. 3, lines 14-18, fig. 1 sheet 1) and for causing said data transmitting means to encrypt data and transmit the encrypted data to said data receiving means over said communication channels, said data transmission controlling method(see col. 3, lines 14-22, fig. 1 sheet 1). Seth-Smith does not disclose encapsulating the data to be transmitted in multiplexed fashion in accordance with a first protocol; encrypting at least one of data capsules resulting from the encapsulation; and encapsulating the encrypted data capsules in accordance with a second protocol. Gotwald discloses encapsulating the data to be transmitted in multiplexed fashion accordance with a first protocol(i.e. internet protocol), encapsulating the data capsules in accordance with a second protocol(i.e. mpeg)(see col. 2, lines 3-13, 17-19, col. 3, lines 56-61). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the encapsulation method of Gotwald with Seth-Smith's encryption method, because encapsulating data is a more efficient method of transmitting information over the network, that can be packaged using a lower level protocol such as mpeg of Gotwald and then the data can be sent over the network, the data sent over the network will be secure with Seth-Smith's method.

6. Same motivation applies above. As per claim 21, Gotwald discloses wherein said encapsulating in accordance with said first protocol(see col. 2, lines 5-8, see fig on front of patent, #44) supplements a real data part including said data to be transmitted to said data

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receiving means with an additional information part associated with said real data part(see fig of front of patent #46).

7. Same motivation applies above. As per claim 22, Gotwald discloses wherein said additional information part includes destination address information identifying the data receiving means authorized to receive data included in said real data part(see col. 4, lines 28-38).

8. Same motivation applies above. As per claim 23, Gotwald discloses wherein said destination address information is an individual(see col. 3, lines 51-53).

9. As per claim 24, Seth-Smith discloses wherein said data transmitting means possesses session keys corresponding to said destination address information, said session keys being used by said data transmitting means to encrypt information and data and by said receiving means to decrypt the encrypted information and data received; and wherein said data transmitting means transmits in advance said session keys to the data receiving means authorized to receive the transmitted information and data in accordance with said destination address information(see col. 3, lines 14-22, col. 10, lines 38-42, col. 22, lines 9-36, 57-60).

10. As per claim 25, Seth-Smith discloses a data transmission controlling, wherein said session keys are updated at predetermined intervals(see col. 11, lines 66-67, col. 12, lines 1-8, col. 19, lines 33-37).

11. As per claim 26, Seth-Smith discloses wherein said session keys are transmitted over a communication channel permitting from said data transmitting means to said data receiving means or bidirectional communication therebetween(see col. 6, lines 49-67).

12. As per claim 28, Seth-Smith discloses wherein said additional information part provides a 48-bit space in which to accommodate said destination address information(see col. 7, lines 48-

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66).

13. Same motivation as applies above. As per claim 29, Gotwald discloses wherein said encapsulating in accordance with the first protocol encapsulates the data to be transmitted to said data receiving means in accordance with the Internet protocol(see col. 2, lines 3-16).

14. As per claim 32, Seth-Smith discloses encrypting the data using an encryption key; supplementing the encrypted data with encryption key information about said encryption key; transmitting said encrypted data together with said encryption key information from said data transmitting means to said data receiving means(see col. 3, lines 23-27, col. 6, lines 30-64, col. 20, lines 22-34); and decrypting, encrypted data using one of a plurality of decryption keys which allow said data receiving means to decrypt said encrypted data and which are updated frequently, said one of the decryption keys being selected in accordance with said encryption key information attached to said encrypted data(see col. 11, lines 66-67, col. 12, lines 1-8, col. 19, lines 33-37).

15. As per claim 33, Seth-Smith discloses wherein said plurality of decryption keys include a decryption key which is currently usable for decrypting said encrypted data received, and a decryption key, encrypted data received; and wherein said data decrypting step selects the currently usable decryption key based on said encryption key information(see col. 3, lines 23-27, col. 20, lines 22-34).

16. As per claim 34, Seth-Smith discloses wherein said encryption key and said decryption keys are session keys(i.e. service key) for encrypting information and data(see col. 3, lines 14-22, col. 10, lines 38-42, col. 22, lines 9-36, 57-60).

17. As per claim 35, Seth-Smith discloses wherein said session keys are updated at



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predetermined intervals(see col. 11, lines 66-67, col. 12, lines 1-8, col. 19, lines 33-37).

18. As per claims 30-31, 36-37, Seth-Smith discloses wherein said data receiving means is constituted as a bridge, Seth-Smith inherently discloses wherein the data receiving means is constituted as an IP router, and bridge, because Seth-Smith discloses a subscription television system that uses a satellite to transmit data(see abstract).

19. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Seth-Smith et al. in view of Gotwald further in view of Mueller.

20. As per claim 27, Gotwald discloses wherein said encapsulating in accordance with said first protocol uniquely determines how said destination address information attached to said real data part is stored into said additional information part(see col. 2, lines 31-54). Seth-Smith-Gotwald combination does not disclose said encrypting step further encrypting said real data part using a master key specific to the data receiving means corresponding to said destination address information. Mueller discloses encrypting step further encrypting said real data part using a master key specific to the data receiving means corresponding to said destination address information(see col. 1, lines 46-61). It would have been obvious to one of ordinary skill in the art to combine the teachings of Mueller within the system of Seth-Smith, Gotwald combination, because encrypting the data using a master key offers a distinct advantage that the intercepted, encrypted messages based on the master key cannot be decrypted at a later time even if access to the actual encryption system is gained(see col. 2, lines 1-7 of Muller).

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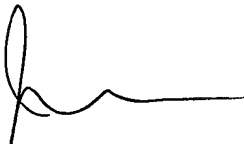
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenise E. Jackson whose telephone number is (571) 272-3791.


The examiner can normally be reached on M-Th (6:00 a.m. - 3:30 p.m.) alternate Friday's.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



January 2, 2007



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